



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
087980,885	12/01/97	ROWLAND	W RFX-349

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EXAMINER
PHAN, J

ART UNIT	PAPER NUMBER
2872	

DATE MAILED: 12/09/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/980,885

Applicant(s)
Rowland et al

Examiner
JAMES PHAN

Group Art Unit
2872



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-14 is/are pending in the application.

Of the above, claim(s) 9-14 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-8 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, drawn to a retroreflective structure, classified in class 359, subclass 529.
 - II. Claims 9-14, drawn to a method of forming retroreflective sheeting, classified in class 264, subclass 1.9.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as cutting or embossing technique.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and the fields of search are not coextensive, restriction for examination purposes as indicated is proper.

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4. During a telephone conversation with Mr. Conway on Dec. 2, 1998 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Arnam. See Fig. 3.

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Van Arnam, column 7, lines 1-4, discloses cube corner trigonal pyramids having size of about 0.003 to about 0.015 inch along the side of the base of the pyramids. Thus, the center-to-center spacing between the apices of adjacent cube corner prisms would be in the range of about 0.002 ($= 0.003 \times 2/3$) to 0.01 ($= 0.015 \times 2/3$) inch. The spacing of 0.002 or above and not greater than 0.003 inch is within the claimed range.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Arnam in view of admitted prior art, U.S. 5,558,740, disclosed on page 12, first paragraph, of the present application.

Van Arnam discloses all claimed features except for arrays of prisms seamed together. The admitted prior art, U.S. 5,558,740, disclosed on page 12, first paragraph, discloses the claimed feature. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of the admitted prior art in Van Arnam for increasing the size of the retroreflective sheeting.

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10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Arnam in view of Walter.

Van Arnam discloses all claimed features except for tips of the apices of adjacent cube corner prisms tilted with respect to one another. However, this feature is known in the art for producing a wide retroreflective angularity. For an instant, Walter discloses a retroreflective structure having cube corner elements tilted at an angle of between about three and ten degrees for producing a wide retroreflective angularity. Thus, it would have been obvious to one skilled in the art at the time the invention was made to apply the teaching of Walter in Van Arnam so as to include cube corner prisms tilted at an angle for improving the retroreflective angularity of the retroreflective structure.

Conclusion

11. Stamm discloses a retroreflective structure which is incorporated in the applied reference to Van Arnam.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Phan whose telephone number is (703) 308-4810. The examiner can normally be reached on M-F from 9:30 to 6:00. The fax phone number for this Group is (703) 308-7722.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Phan, J.

Dec. 5, 1998



James Phan
Primary Examiner